The limits of multiplexing of quantum and classical channels: Case study of a 2.5 GHz discrete variable QKD system

Université de Genève
Quantum Technologies
Fadri Grünenfelder

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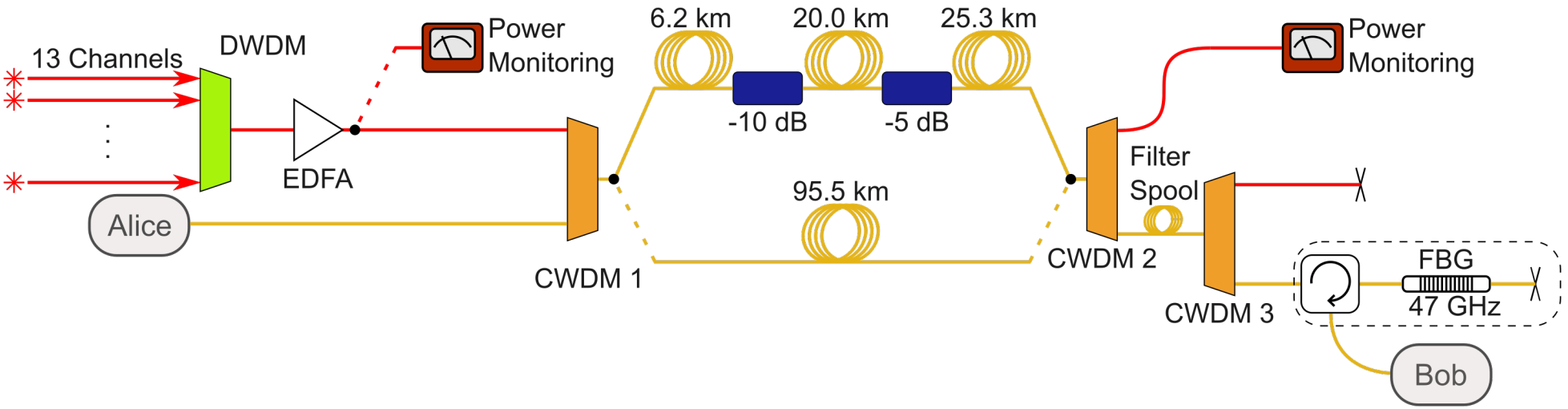
OPEN QKD

UNIVERSITÉ DE GENÈVE

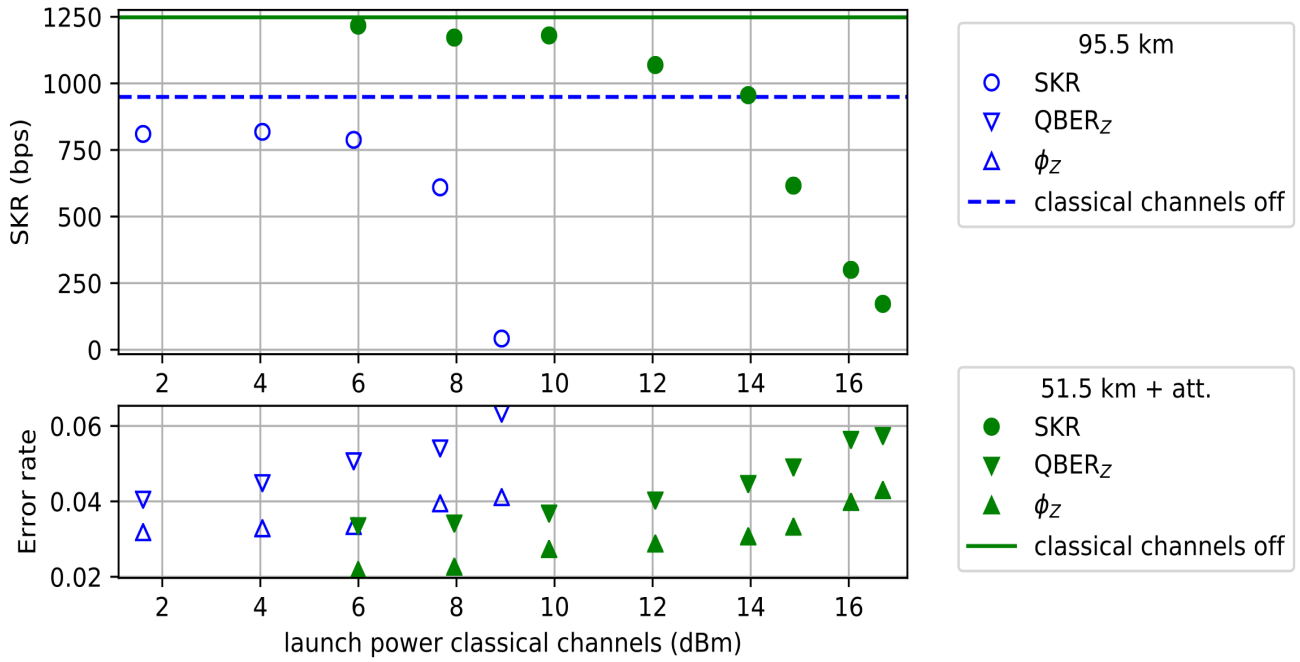
QSIT Quantum Science and Technology
National Centre of Competence in Research

Network Environment



- What is the **maximum classical launch power** which can be tolerated experimentally and theoretically?

Secret Key Exchange



Conclusion

- Distribution of a secret key possible up to a **distance of 95.5 km** with co-propagating classical signal **power of 8.9 dBm**
- Ideal scenario: **27 dBm launch power at 95.5 km**

In The Complete Talk:

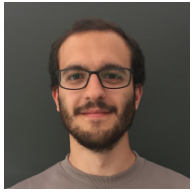
- **1310 nm vs 1550 nm** quantum channel wavelength
- Description of **QKD system**
- **Comparison** to previous studies

Thank you for your attention!

The QKD Team

Hugo Zbinden
(Professor)

Alberto Boaron
(Postdoc)



Davide Rusca
(Postdoc)

Raphael Houlmann
(FPGA Engineer)

Claudio Barreiro
(Electronic Engineer)

Rebecka Sax
(PhD student)

Maria Ana Pereira
(PhD student)

Fadri Grünenfelder
(PhD student)